



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

Department of Revenue

COMMISSIONER'S OFFICE

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February 15, 2016

The Honorable Cathy Giessel
Alaska State Senator
Chair, Senate Resources Committee
State Capitol Room 427
Juneau, AK 99801

Dear Senator Giessel:

The purpose of this letter is to provide you with responses to the questions asked of the Department of Revenue during our presentation to the Senate Resources Committee on February 3, 2016. Please see questions in italics and our responses immediately below the questions.

- 1. What local taxes apply to our large mines? What is the approximate total government take from the mining industry?*

Some of Alaska's major mines pay taxes to the municipal governments in whose jurisdictions they are located. Unlike state Mining License Tax records, which are confidential, these mines' municipal tax liabilities can generally be determined from public information.

- Fort Knox Mine is the largest taxpayer in the Fairbanks North Star Borough. According to the Fairbanks North Star Borough property database, Fort Knox (through its operator, Fairbanks Gold Mining Inc.) owed about \$7.5 million of property taxes in 2015. This amount rose from roughly \$5 million in 2011. The tax rate was 13.45 mills and the assessed property value was about \$560 million.
- Red Dog Mine, located in the Northwest Arctic Borough, pays the borough a "payment in lieu of tax" (PILT). Recently, the borough adopted a new severance tax which Red Dog's owner, Teck Alaska, claims would increase its payments to the borough from about \$12 million to \$40 million or more.¹ The borough disputes this claim, saying that at current zinc prices Teck would pay only \$20 million under the severance tax.² The two parties are in negotiation for a new PILT agreement.
- Kensington Mine is in Juneau. According to the Juneau property assessor's database, Kensington's owner (Coeur Alaska) holds about \$130 million worth of land. Juneau's property tax rate for areas outside the road and fire service areas in FY 2014 was 8.04 mills³, so Kensington's property tax liability can be calculated at roughly \$1 million.
- Greens Creek Mine, also in Juneau, is owned by Hecla. The property is worth about \$104 million, so again calculating from Juneau's tax rate, Hecla should owe about \$830,000 in property tax.

¹ <http://www.alaskapublic.org/2016/01/15/red-dog-mine-sues-borough-over-severance-tax/>

² <http://nwabor.org/pdfs/NAB%20-%20Press%20Release%201-15-15.pdf>

³ <http://www.juneau.org/finance/taxinfo.php>

- Usibelli Coal Mine is in the Denali Borough, which charges a severance tax of \$0.05 per ton of coal.⁴ According to Usibelli’s own website, it produces about 2 million tons of coal per year, so that would make it subject to about \$100,000 per year in borough severance tax.
- The sixth major Alaska mine, Pogo (owned by Sumitomo), is not located in any borough or city.

In addition to these local taxes, the state government collected approximately \$38 million in Mining License Tax in FY 2015. The state also collects corporate income tax from mining-related companies. In FY 2014, the most recent year for which data are available, corporate income tax from the mining industry totaled about \$15 million, as shown in the attached Sector Report.

2. *What percentage has Red Dog Mine reimbursed AIDEA for the road?*

As of January 31, 2016, the outstanding bond principal was \$52.2 million, compared to total net AIDEA investment of \$265.0 million; therefore approximately 80.3% of the total investment principal has been paid. Including interest, total payments to AIDEA have amounted to \$443.5 million.

3. *If the mining tax structure proposed in SB 137 (i.e., an increase in the top rate to 9%) had been in place in previous years, how much revenue would the state have received from the Mining License Tax?*

Almost all Mining License Tax revenue comes from the state’s six large mines. The effective tax rate on the **total** income from these mines tends to be near the top marginal rate, which is currently 7%. This does not say anything about the effective rate for a particular mining operation, which may be low or even zero if the mine is not profitable in a given year.

SB 137 would increase the top marginal tax rate from 7% to 9%. Since most revenue comes from the large mines, we can estimate how much revenue the state would have received under this structure in previous years by multiplying historical revenue figures by 9/7.

Fiscal year	Actual MLT revenue	SB 137 est. revenue	Est. change
FY 2015	39	50	11
FY 2014	23	30	7
FY 2013	47	60	13
FY 2012	41	52	11
FY 2011	49	63	14

All figures are in millions of dollars and include only General Fund revenue. The estimated figures should be regarded as maximums.

⁴ [http://www.denaliborough.govoffice.com/vertical/sites/%7B63112C6F-13FC-4147-831D-8F3F0E33EC53%7D/uploads/Severance Tax Return \(Revised 10 2014\) fill-in format.pdf](http://www.denaliborough.govoffice.com/vertical/sites/%7B63112C6F-13FC-4147-831D-8F3F0E33EC53%7D/uploads/Severance%20Tax%20Return%20(Revised%2010%202014)%20fill-in%20format.pdf)

4. *What is the economic impact of removing the 3½-year exemption for new mines on Alaska jobs and families?*

With so few mining projects of significant size in Alaska, there is not enough data to analyze the specific economic impact of the 3½-year exemption. However, the mining industry has indicated they are more concerned about this provision of the bill than the tax rate increase.

The Department of Revenue would note that the Mining License Tax is a tax on net income (i.e., profits), not a tax on mineral value. Therefore, imposing the tax in the first 3½ years of a mining operation's life would not cause the mine to switch from being profitable to unprofitable. The tax could reduce the mine's profits by at most 9%.

5. *Can we get more research into how Alaska's mining tax regime compares to other states and countries? How long is the average permitting window for these other states and countries?*

Several documents are attached which we hope will prove useful. First is a summary of all state severance taxes, including mining taxes, in the U.S. Second is a web page from Natural Resources Canada showing all mining-specific federal tax provisions in that country.

Third is a detailed comparison of Canadian federal and provincial taxes on mining. While slightly outdated (from 2009), this document provides valuable information. For example, British Columbia charges a mining tax of 13% on net proceeds (see page 23), significantly higher than the 9% rate that Alaska would charge under the proposed increase in SB 137. Yukon's mining tax is called a "royalty", but is also related to the mine's profits (page 37). Yukon's mining tax rate is:

- 3% on profits between \$10,000 and \$1 million
- 5% on profits between \$1 and \$5 million
- 6% on profits between \$5 and \$10 million
- An additional 1 percentage point higher on each additional bracket of \$5 million

Thus it is lower than Alaska's or B.C.'s for some mines, but can be increased without limit (up to 100%) if the mine is profitable enough. The appendix of the Canadian Mining Taxation – 2009 document provides further useful comparisons.

On the issue of permitting timelines, there is no simple answer to how long the average timeline is, but the Alaska Department of Natural Resources tells applicants that it takes three to five years to permit a major hard-rock mine in Alaska if everything goes perfectly. This does not include lawsuits and appeals, which can add more years to the timeline. The Alaska DNR polled several other states that permit major mining operations, and received the following answers:

- Montana: There is no simple answer and no "average" figure would be meaningful. We can knock out a permit for a quarry in inert igneous rock located away from the public eye in 6-9 months, but at the other end of the spectrum we have been working intermittently on an underground copper-silver deposit (Rock Creek) located underneath a wilderness area for over 30 years.
- Wyoming: The timeline required would largely depend on if the mineral were patented (locatable) and both surface and mineral were controlled by the developer. If surface and mineral are private the general rule of thumb is two to three years pending no third party legal action. In the case where there is federal surface or federal mineral, and a federal level EIS is required the general rule of thumb is five years for the environmental impact statement (EIS) and two to three years for the permitting. This also assumes no litigation from third party interest groups. Wyoming's most recent action that involved significant litigation resulted in a three year additional time delay.
- Arizona: Opening a new major hard rock copper mine in Arizona takes 5-15 years. Reopening a mine can be done fairly quickly if entirely in the same footprint. The length is

difficult to quantify as the length of time for an EIS can take many years and then the EPA can review it after the lead agency has completed their work.

- Nevada: Permitting time is about 8 months for a small operation above the water table and up to 4 years for a large operation. Time is proportional to size and depth of the proposed operation. The typical average is 30 – 36 months.

I hope you find this information to be useful. Please do not hesitate to contact me if you have further questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Randall Hoffbeck".

Randall Hoffbeck
Commissioner

Attachments: CIT Sector Report FY 2014; State Severance Taxes 2015; Canadian Mining Taxation – 2009; Mining-Specific Tax Provisions (Natural Resources Canada)

Non-Petroleum Corporate Income Tax Collections by Sector

Prepared by: Will Bishop, Economist, (907) 465-8222 or william.bishop@alaska.gov

Purpose: To present an analysis by business sector of non-petroleum corporate income tax collections received during recent fiscal years.

Data Source: Tax collections are from payments and refunds data for the relevant fiscal year, as reported in the Tax Accounting System and in GenTax and as queried by the Tax Division's Economic Research Group. Sector classifications are based on Department of Revenue determinations using taxpayer-reported NAICS codes and public information about companies. This report presents an analysis of corporate income tax collections from companies meeting the "water's edge" combined reporting requirement, and reporting corporate income taxes under AS 43.20.073. Companies that produce oil & gas or own pipelines involved in transportation of oil and gas report corporate income tax under AS 43.20.072 and are excluded from the this report.

Key Assumptions: Sector classifications are based on Department of Revenue determination using definitions listed on the "Definitions" worksheet.

Disclaimer: Collections for a fiscal year include quarterly estimated payments and may also include payments, assessments, or amended returns, and refunds for prior years. Large payments, assessments or refunds can distort the collections data for any specific year. Total collections may not exactly match Revenue Sources Book figures due to timing issues. Tax collections received during a fiscal year are not equal to tax liabilities reported during the fiscal year. Generally, only C corporations pay (i.e., not S corporations) corporate income tax. Thus, industry representation is dependent upon the form of organization of businesses in each industry.

Most corporations file as part of a consolidated group. The industry classification reflects the Department of Revenue's subjective judgment about the corporation's **primary** activities within Alaska. This report does not necessarily reflect every industry in which the consolidated group participates. Therefore, this report may not be an accurate reflection of industry activities conducted in Alaska.

The Department of Revenue is in the process of reviewing and updating the data on which this analysis is based. As a result, future analysis could have different results.

CORPORATE INCOME TAX COLLECTIONS by Sector for Corporations Subject to AS 43.20.073

Sector	FY 2010		FY 2011		FY 2012		FY 2013		FY 2014	
	%	Collections	%	Collections	%	Collections	%	Collections	%	Collections
Construction	7%	5,901,892	2%	3,462,315	3%	3,267,002	3%	3,860,578	2%	2,412,142
Finance	36%	29,381,164	11%	17,530,085	16%	16,787,284	12%	13,449,943	18%	18,801,906
Fisheries	1%	665,299	1%	1,386,061	3%	2,818,460	3%	2,815,554	1%	787,932
Manufacturing	-1%	(985,867)	3%	4,176,299	12%	12,633,838	1%	1,211,599	0%	446,815
Mining	-3%	(2,558,970)	50%	81,790,274	15%	15,020,036	24%	26,826,073	15%	15,215,598
Real Estate	1%	609,000	0%	60,618	1%	795,495	0%	190,450	2%	1,571,395
Retail	21%	16,740,969	10%	16,671,289	18%	18,364,389	14%	15,431,295	19%	19,193,636
<i>Restaurants & Bars</i>		<i>884,518</i>		<i>529,314</i>		<i>332,043</i>		<i>(327,201)</i>		<i>582,398</i>
Services	24%	19,616,051	14%	23,868,450	18%	18,702,976	25%	28,046,608	12%	11,986,665
Transportation**	0%	(78,538)	4%	6,725,027	5%	5,635,833	7%	8,013,315	15%	15,667,046
Utility & Comm.	9%	7,458,235	0%	542,165	1%	1,485,430	3%	3,213,904	3%	2,877,666
Wholesale	6%	4,785,290	5%	8,529,242	8%	7,803,566	8%	9,300,032	13%	13,836,447
Other Sectors*	0%	9,495	0%	19,853	0%	61,205	0%	126,782	0%	50,373
Total		<u>\$81,544,019</u>		<u>\$164,761,679</u>		<u>\$103,375,514</u>		<u>\$112,486,134</u>		<u>\$102,847,620</u>
Sectors Included in Services										
<i>Health care</i>	22%	<i>4,338,134</i>	11%	<i>2,555,412</i>	16%	<i>2,947,854</i>	9%	<i>2,417,856</i>	-4%	<i>(424,464)</i>
<i>Oil & Gas Services</i>	31%	<i>6,135,402</i>	67%	<i>15,914,956</i>	54%	<i>10,006,283</i>	42%	<i>11,715,963</i>	48%	<i>5,740,279</i>
<i>Tourism</i>	26%	<i>5,115,023</i>	15%	<i>3,483,065</i>	13%	<i>2,443,761</i>	25%	<i>7,030,197</i>	22%	<i>2,621,338</i>
<i>Other</i>	21%	<i>4,027,492</i>	8%	<i>1,915,017</i>	18%	<i>3,305,079</i>	25%	<i>6,882,592</i>	34%	<i>4,049,512</i>
<i>Total Services</i>		<i><u>19,616,051</u></i>		<i><u>23,868,450</u></i>		<i><u>18,702,976</u></i>		<i><u>28,046,608</u></i>		<i><u>11,986,665</u></i>

*Includes forestry, insurance and oil companies reporting under AS 43.20.073 which are combined for confidentiality and other adjustments

**Includes both air and non-air transportation companies, a change from previous years.

NOTES:

This report presents an analysis of corporate income tax collections from companies meeting the "waters edge" combined reporting requirement, and reporting corporate income taxes under AS 43.20.073. Companies that produce oil & gas or own pipelines involved in transportation of oil and gas file corporate income tax under AS 43.20.072 and are excluded from the this report. Additionally, most corporations file as part of a consolidated group. The industry classification identified by the taxpayer usually reflects the group's primary operations which are not necessarily its primary Alaska operations. Therefore, tax collections by sector are based on Department of Revenue interpretations of each consolidated group of corporation's primary Alaska operations and may not match nationally assigned NAICS codes.

(1) Total collections may not exactly match Revenue Sources Book figures due to timing issues.

(2) Collections include estimated payments, payments with returns, payments from collections, and refunds.

(3) Negative amounts indicate that (refunds) exceeded payments for the fiscal year.

(4) Timing of payments, refunds or assessment activity adds volatility between fiscal years.

Sector Definitions for Corporate Income Tax Sector Analysis

Corporations are assigned to sectors based on Department of Revenue determination of their primary line of business. The few corporations whose primary line of business cannot be determined are assigned to the Services category.

Construction: Corporations primarily involved in building infrastructure, including homes, buildings, transportation infrastructure, etc. Building contractors and maintenance companies (such as electrical or plumbing) are included in this category.

Finance: Corporations primarily involved directly in financial markets, such as banks, brokers, leasing companies (equipment and other non-real estate goods), investment, and lending companies (excluding mortgage companies).

Fisheries: Corporations primarily involved in the fishing sector, including processing, stock preservation, or harvesting of fish. This category includes fish processors that are classified as manufacturers under NAICS.

Manufacturing: Corporations primarily involved in physically creating goods to be sold in either the wholesale or retail market. Printing, metalworking and fertilizer manufacturing are examples of activities included in this category. Manufacturing does not include fish processing which is included under fisheries, or wood products which is included under Other Sectors. If a company manufactures items elsewhere but sells them in Alaska, it is generally classified as Wholesale.

Mining: Corporations primarily involved in the extraction of minerals other than oil, such as gold, silver, coal, or sand and gravel.

Real Estate: Corporations primarily involved in the buying, selling and operation of real estate, including home owners associations, realtors, renting or leasing, and financial companies that primarily deal in real estate or mortgages.

Retail: Corporations primarily involved in selling goods directly to consumers (final users of the good).

Restaurants/bars: Corporations primarily involved in serving food or beverages to consumers.

Services: Corporations primarily involved in providing non-material services to consumers or other businesses.

Tourism: Corporations primarily involved in leisure and recreation services. Tourism includes hotels, lodges and guided tour operators. Air transportation including helicopters is included in Airlines category; other transportation is included in Transportation category.

Oil & Gas Services: Corporations primarily involved in providing support services to oil or gas exploration or production companies.

Health care: Corporations primarily involved in providing health services to patients, or corporations involved in providing individual health care goods such as prosthetics. This category does not include manufacturers of drugs and other supplies; these companies are generally classified as wholesale.

Transportation: Corporations primarily involved in transporting people and goods, such as airlines, trucking, and ocean transport. Note that airlines are included under "Transportation", a change from previous years of this report.

Utilities & Communications: Corporations primarily involved in constructing, maintaining, or providing communications or utilities. Newspapers, radio, television and magazines are included in this category.

Wholesale: Corporations primarily involved in selling goods to intermediate consumers that intend to resell or use the goods to operate their business.

Other Sectors: This category combines Forestry (corporations primarily involved in harvesting or processing timber), Insurance (corporations primarily involved in underwriting, selling or collecting insurance that are not exempt from the Corporate Income Tax by virtue of paying the Insurance Premium Tax) and oil companies reporting under AS 43.20.073.

DMTS Financial Information
(rounded to nearest \$1,000)

Original Investment	180,188,000
Expansion	<u>84,846,000</u>
Total net investment	265,034,000

Amortization period ranges from 1/1/1990-10/1/2040
Interest rate is 6.5%

Net Investment Balance-1/31/16	155,712,000
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Payments to AIDEA thru 1/31/16 (includes principal and interest)	443,519,000
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Minimum annual payments due (excludes tonnage-sensitive (released from a reserve fund) or potential price-sensitive payments)	17,670,000
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Outstanding bond principal-1/31/16	52,185,000
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TAXES

Table 7.15
STATE SEVERANCE TAXES: 2015

<i>State</i>	<i>Title and application of tax (a)</i>	<i>Rate</i>
Alabama	Iron Ore Mining Tax	\$.03/ton.
	Forest Products Severance Tax	Varies by species and ultimate use.
	Oil and Gas Conservation & Regulation of Production Tax	2% of gross value at point of production, of all oil and gas produced. 1% of the gross value (for a 5-year period from the date production begins) for well, for which the initial permit issued by the Oil and Gas Board is dated on or after July 1, 1996 and before July 1, 2002, except a replacement well for which the initial permit was dated before July 1, 1996; 1.66% gross proceeds from offshore production greater than 8,000 ft. below sea level.
	Oil and Gas Privilege Tax on Production	8% of gross value at point of production; 4% of gross value at point of incremental production resulting from a qualified enhanced recovery project; 4% if wells produce 25 bbl. or less oil per day or 200,000 cu. ft. or less gas per day; 6% of gross value at point of production for certain on-shore and off-shore wells. A 50% rate reduction for wells permitted by the oil and gas board on or after July 1, 1996, and before July 1, 2002, for 5 years from initial production, except for replacement wells for which the initial permit was dated before July 1, 1996; 3.65% gross proceeds from offshore production greater than 8,000 ft. below sea level;
	Coal and Lignite Severance Tax	\$.20/ton in addition to coal severance tax. In 2012, state legislature extended through 2021.
Alaska	Local Solid Minerals Tax	Varies by county for sand, clay, gravel, granite, shale, and other products.
	Uniform Natural Minerals Tax	\$.10/ton.
	Cost Recovery Fisheries Assessment (b)	Elective; currently no assessments in place.
	Dive Fishery Management Assessment (b)	Elective; currently 7% of value for select dive fishery species in select management regions.
	Fisheries Business Tax	Tax based on unprocessed value of fishery resources processed in or exported from the state. 1% of value for shore-based processing in developing fisheries; 3% of value for floating processing in developing fisheries or shore-based processing in established fisheries; 4.5% of value for salmon cannery processing in established fisheries; 5% of value for floating processing in established fisheries.
	Fishery Resource Landing Tax	Tax based on unprocessed value of fishery resources processed outside and first landed in the state. 1% of value for developing fisheries; 3% of value for established fisheries.
	Mining License Tax	Up to 7% of net income and royalties received in connection with mining properties and activities in Alaska. New mining operations other than sand and gravel exempt for 3 ½ years after production begins.
	Alaska Oil Production Tax	Alaska will impose a base rate of 35 percent on oil companies' net profits in the state, replacing a 25 percent base rate that increased by 0.4 percentage points for every \$1 above a net wellhead price of \$30.
	Salmon Enhancement Tax (b)	Elective; 2% or 3% of value for salmon sold in or exported from select aquaculture regions.
	Seafood Development Tax (b)	Elective; currently 1% of value for select commercial fish species in select seafood development regions.
Seafood Marketing Assessment (b)	Elective; currently 0.5% of value for all commercial fish species exported from, landed or processed in-state.	
Arizona	Severance Tax	2.5% of net severance base for mining (metalliferous minerals); \$1.51/1,000 board ft. (\$.213 for ponderosa pine) for timbering. 3.125% for oil and gas production and nonmetal mining.
Arkansas	Natural Resources Severance Tax	Separate rate for each substance. Timber \$0.178/ton (pine), all other \$0.125/ton.
	Oil and Gas Conservation Tax	Natural gas 1.25%, 1.5%, and 5% depending on well classification; crude oil 4% to 5% depending on production levels.
California	Oil and Gas Conservation Assessment	Maximum 43 mills/bbl. of oil and 9 mills per MCF produced of gas.
	Oil and Gas Production Assessment	Rate determined annually by Department of Conservation to fund agency operations; no state severance tax.
	Lumber Tax	The Lumber Tax was enacted in Sept. 2012. Retailers are required to impose a 1% tax on lumber sold in California.
Colorado	Severance Tax (c)	Taxable years commencing prior to July 1, 1999, 2.25% of gross income exceeding \$11 million for metallic minerals and taxable years commencing after July 1, 1999, 2.25% of gross income exceeding \$19 million for metallic minerals; on or after July 1, 1999, \$.05/ton for each ton exceeding 625,000 tons each quarter for molybdenum ore; 2% to 5% based on gross income for oil, gas, CO ₂ , and coalbed methane; after July 1, 1999, \$.36/ton adjusted by the producers' prices index for each ton exceeding 300,000 tons each quarter for coal; and 4% of gross proceeds on production exceeding 15,000 tons per day for oil shale.
	Oil and Gas Conservation Levy (d)	0.07% charge on all oil, natural gas, and CO ₂ produced.

See footnotes at end of table.

STATE SEVERANCE TAXES: 2015—Continued

State	Title and application of tax (a)	Rate
Florida	Oil, Gas and Sulfur Production Tax	5% of gross value for small well oil, and 8% of gross value for all other, and an additional 12.5% for escaped oil; tiered formula for tertiary oil; the gas base rate (\$0.171) times the gas base adjustment rate each fiscal year for gas; and the sulfur base rate (\$2.43) times the sulfur base rate adjustment each fiscal year for sulfur.
	Solid Minerals Tax (c)	8% of the value of the minerals severed; heavy minerals (rate computed annually at \$1.34/ton plus times the surcharge rate currently at 2.57) and phosphate rock (rate computed annually at a base rate of \$1.61/ton plus \$1.38 surcharge adjustment).
Idaho.....	Mine License Tax	1% of net value.
	Oil and Gas Production Tax	Maximum of 5 mills/bbl. of oil and 5 mills/50,000 cu. ft. of gas. Current conservation rate is 5 mills (.005).
	Additional Oil and Gas Production Tax	2.5% of market value at site of production.
Illinois.....	Oil and Gas Production Assessment (f)	0.1% fee per well of gross revenue for oil and natural gas.
	Timber Fee	4% of purchase price. (g)
Indiana.....	Petroleum Severance Tax (h)	1% of value or \$.24 per barrel for oil or \$.03 per 1,000 cu. ft. of gas, whichever is greater.
Kansas	Severance Tax (i)	8% of gross value of oil and gas, less property tax credit of 3.67%; \$1/ton of coal.
	Oil Inspection Fee/barrel (i)	\$.015/barrel.
	Oil and Gas Conservation Tax	91.00 mills/bbl. crude oil or petroleum marketed or used each month; 12.9 mills/1,000 cu. ft. of gas sold or marketed each month.
	Mined-Land Conservation & Reclamation Tax	\$50, plus per ton fee of between \$.03 and \$.10.
Kentucky	Oil Production Tax	4.5% of market value.
	Coal Severance Tax	4.5% of gross value, less transportation expenses; \$.50/ton minimum for extraction and processing.
	Natural Resource Severance Tax	4.5% of gross value, less transportation expenses.
Louisiana.....	Natural Gas Severance Tax (j)	The natural gas severance tax rate effective July 1, 2014 through June 30, 2015 has been set at 16.3 cents per thousand cubic feet (MCF) measured at a base pressure of 15.025 pounds per square inch absolute and at the temperature base of 60 degrees Fahrenheit. This tax rate is set each year by multiplying the natural gas severance tax base rate of 7 cents per MCF by the "gas base rate adjustment" determined by the Secretary of the Department of Natural Resources in accordance with R.S. 47:633(9)(d)(i). The "gas base rate adjustment" is a fraction, of which the numerator is the average of the New York Mercantile Exchange (NYMEX) Henry Hub settled price on the last trading day for the month, as reported in <i>The Wall Street Journal</i> for the previous 12-month period ending on March 31, and the denominator is the average of the monthly average spot market prices of gas fuels delivered into the pipelines in Louisiana as reported by the Natural Gas Clearing House for the 12-month period ending March 31, 1990 (1.7446\$/MMBTU). Based on this computation, the Secretary of the Department of Natural Resources has determined the natural gas severance "gas base rate adjustment" for April 1, 2013, through March 31, 2014, to be 232.34 percent. Applying this gas base rate adjustment to the base tax rate of 7 cents per MCF produces a tax rate of 16.3 cents per MCF effective July 1, 2014, through June 30, 2015. The reduced natural gas severance tax rates provided for in R.S. 47:633(9)(b) and (c) remain the same.
	Oil/Condensate Severance Tax (j)	Value on a per barrel basis (42 gallons) the rates are: full-rate, 12.5%; incapable oil rate, 6.25%; stripper oil rate, 3.25%; reclaimed oil, 3.25%; produced water full-rate, 10%; produced water incapable oil rate, 5.0%; produced water stripper oil rate, 2.5%.
	Timber Severance Tax (j)	Louisiana Revised Statute 47:633 imposes a severance tax on timber and pulpwood based on the trees and timber 2.25% of current stumpage value determined by state commission; pulpwood 5% of current stumpage value; current average stumpage market value determined annually on the second Monday of December by the Louisiana Forestry Commission Effective for 2015, the timber values to be used to determine the severance tax on timber are as follows: Pine Sawtimber, Value Per Ton \$31.68, Tax Rate 2.25%, Tax Per Ton \$0.71; Hardwood Sawtimber, Value Per Ton \$35, Tax Rate 2.25%, Tax Per Ton \$0.79; Pine Chip-n-Saw, Value Per Ton \$16.50, Tax Rate 2.25%, Tax Per Ton \$0.37; Pulpwood Pine, Value Per Ton \$8.76, Tax Rate 5.00%, Tax Per Ton \$0.44; Pulpwood Hardwood, Value Per Ton \$10.50, Tax Rate 5.00%, Tax Per Ton \$0.53.
	Mineral Severance Tax (j)	Various fees on a per ton basis for products like sulphur, salt, marble, stone, sand, lignit, and others.
	Oil Field Site Restoration Fee Freshwater Mussel Tax	Rate varies according to type of well and production. 5% of revenues from the sale of whole freshwater mussels, at the point of first sale.

See footnotes at end of table.

TAXES

STATE SEVERANCE TAXES: 2015—Continued

<i>State</i>	<i>Title and application of tax (a)</i>	<i>Rate</i>
Maine	Mining Excise Tax	The greater of a tax on facilities and equipment or a tax on gross proceeds.
Maryland	Mine Reclamation Surcharge	\$.15/ton of coal removed by open-pit, strip or deep mine methods. Of the \$.15, \$.06 is remitted to the county from which the coal was removed.
Michigan	Gas and Oil Severance Tax	5% (gas), 6.6% (oil) and 4% (oil from stripper wells and marginal properties) of gross cash market value of the total production. Maximum additional fee of 0.82% of gross cash market value on all oil and gas (2015 fee).
Minnesota	Taconite and Iron Sulfides Direct Reduced Iron (k)	\$2.56 per ton of concentrates or pellets (rate indexed to inflation by law). \$2.56 per ton of concentrates plus an additional \$.03 per ton for each 1% that the iron content exceeds 72%.
Mississippi	Oil and Gas Severance Tax	6% of value at point of gas production; 3% of gross value of occluded natural gas from coal seams at point of production for well's first five years; also, maximum 35 mills/bbl. oil or 4 mills/1,000 cu. ft. gas (Oil and Gas Board maintenance tax). 6% of value at point of oil production; 3% of value at production when enhanced oil recovery method used.
	Timber Severance Tax	Varies depending on type of wood and ultimate use.
	Salt Severance Tax	3% of value of entire production in state.
Montana	Coal Severance Tax	Varies from 3% to 15% depending on quality of coal and type of mine.
	Metalliferous Mines License Tax (l)	Progressive rate, taxed on amounts in excess of \$250,000. For concentrate shipped to smelter, mill or reduction work, 1.81%. Gold, silver or any platinum group metal shipped to refinery, 1.6%.
	Oil or Gas Conservation Tax	Maximum 0.3% on the market value of each barrel of crude petroleum oil or 10,000 cu. ft. of natural gas produced, saved and marketed or stored within or exported from the state. (m)
	Oil and Natural Gas Production Tax	Varies from 0.5% to 14.8% according to the type of well and type of production.
	Miscellaneous Minerals License Tax	\$.05/ton.
	Cement License Tax (n)	\$.22/ton of cement, \$.05/ton of cement, plaster, gypsum or gypsum products.
	Resource Indemnity Trust Tax	\$25 plus 0.5% of gross value greater than \$5,000. For talc, \$25 plus 4% of gross value greater than \$625. For coal, \$25 plus 0.40% of gross value greater than \$6,250. For vermiculite, \$25 plus 2% of gross value greater than \$1,250. For limestone, \$25 plus 10% of gross value greater than \$250. For industrial garnets, \$25 plus 1% of gross value greater than \$2,500.00.
Nebraska	Oil and Gas Severance Tax	3% of value of nonstripper oil and natural gas; 2% of value of stripper oil.
	Oil and Gas Conservation Tax	Two percent of value of stripper oil. Maximum 15 mills/\$1 of value at wellhead, as of January 1, 2000. (f)
	Uranium Tax	2% of gross value over \$5 million. The value of the uranium severed subject to tax is the gross value less transportation and processing costs.
Nevada	Minerals Extraction Tax	Between 2% and 5% of net proceeds of each geographically separate extractive operation, based on ratio of net proceeds to gross proceeds of whole operation.
	Oil and Gas Conservation Tax	\$.50/mills/bbl. of oil and 50 mills/50,000 cu. ft. of gas.
New Hampshire	Refined Petroleum Products Tax	0.1% of fair market value.
	Excavation Tax	\$.02 per cubic yard of earth excavated.
	Timber Tax	10% of stumpage value at the time of cutting. Not assessed under the general property tax but rather is taxed by municipalities.
New Mexico	Resources Excise Tax (o)	Potash .5%, molybdenum .125%, all others .75% of value.
	Severance Tax (o)	Copper .5%, timber .125% of value. Pumice, gypsum, sand, gravel, clay, fluorspar and other non-metallic minerals, 125% of value. Gold, silver .20%; Lead, zinc, thorium, molybdenum, manganese, rare earth and other .125% of value.
	Oil and Gas Severance Tax	3.75% of value of oil, other liquid hydrocarbons, natural gas and carbon dioxide.
	Oil and Gas Emergency School Tax	3.15% of value of oil, other liquid hydrocarbons and carbon dioxide. 4% of value of natural gas.
	Natural Gas Processor's Tax	\$.0220/Mmbtu tax on volume.
	Oil and Gas Ad Valorem Production Tax	Varies, based on property tax in district of production.
	Oil and Gas Conservation Tax (p)	0.19% of value.
North Carolina	Oil and Gas Conservation Tax	Maximum 5 mills/barrel of oil and 0.5 mill/1,000 cu. ft. of gas.
	Primary Forest Product Assessment Tax	\$.50/1,000 board ft. for softwood sawtimber, \$.40/1,000 board ft. for hardwood sawtimber, \$.20/cord for softwood pulpwood, \$.12/cord hardwood pulpwood.

See footnotes at end of table.

STATE SEVERANCE TAXES: 2015—Continued

<i>State</i>	<i>Title and application of tax (a)</i>	<i>Rate</i>
North Dakota	Oil Gross Production Tax	5% of gross value at well.
	Gas Gross Production Tax	\$.04/1,000 cu.ft. of gas produced (the rate is subject to a gas rate adjustment each fiscal year). Through June 30, 2013, the rate was \$.0982 per mcf.
	Coal Severance Tax	\$.375/ton plus \$.02/ton. (q)
	Oil Extraction Tax	6.5% of gross value at well (with exceptions due to production volumes and and production incentives for enhanced recovery projects).
Ohio	Resource Severance Tax	\$.10/bbl. of oil; \$.025/1,000 cu. ft. of natural gas; \$.04/ton of salt; \$.02/ ton of sand, gravel, limestone and dolomite; \$.10/ton of coal; and \$.001/ ton of clay, sandstone or conglomerate, shale, gypsum or quartzite.
Oklahoma	Oil, Gas and Mineral Gross Production Tax and Petroleum Excise Tax (r)	Rate: 0.75% levied on asphalt and metals. 7% (if greater than \$2.10 mcf) 4% (if greater than \$1.75 mcf, but less than \$2.10 mcf) 1% (if less than \$1.75 mcf) casinghead gas and natural gas as well as 0.95% being levied on crude oil, casinghead gas and natural gas. Oil Gross Production Tax is now a variable rate tax, beginning with January 1999 production, at the following rates based on the average price of Oklahoma oil: a) If the average price equals or exceeds \$17/bbl, the tax shall be 7%; b) If the average price is less than \$17/bbl, but is equal to or exceeds \$14/bbl, the tax shall be 4%; c) If the average price is less than \$14/bbl, the tax shall be 1%.
Oregon	Forest Products Harvest Tax	\$3.5316/1,000 board ft. harvested from public and private land—through Dec. 31, 2013.
	Oil and Gas Production Tax	6% of gross value at well.
	STF Severance Tax— Eastern Oregon Forestland Option	\$4.03/1,000 board ft. harvested from land under the Small Tract Forestland Option—through Dec. 31, 2015.
	STF Severance Tax— Western Oregon Forestland Option	\$5.18/1,000 board ft. harvested from land under the Small Tract Forestland Option—through Dec. 31, 2015.
Pennsylvania	Natural Gas Severance Tax	Annual \$50,000 per-well fee. Local fees and taxes determined by county.
South Carolina	Forest Renewal Tax	Softwood products: 50 cents per 1,000 board feet or 20 cents per cord. Hardwood products: 25 cents per 1,000 board feet or 7 cents per cord.
South Dakota	Precious Metals Severance Tax	\$4 per ounce of gold severed plus additional tax depending on price of gold; 10% on net profits or royalties from sale of precious metals, and 8% of royalty value.
	Energy Minerals Severance Tax (s)	4.5% of taxable value of any energy minerals.
	Conservation Tax	2.4 mills of taxable value of any energy minerals.
Tennessee	Oil and Gas Severance Tax	3% of sales price.
	Coal Severance Tax (t)	\$1.00/ton (effective 7/17/13).
	Mineral Tax	Up to \$.015 per ton, rate set by county legislative body.
Texas	Natural Gas Production Tax	7.5% of market value of gas. Condensate Production Tax: 4.6% of market value of gas.
	Crude Oil Production Tax	4.6% of market value or \$.046/bbl.
	Sulphur Production Tax	\$1.03/long ton or fraction thereof.
	Cement Production Tax	\$.055 per ton or \$.0275/100 lbs. or fraction of 100 pounds of taxable cement.
	Oil-Field Cleanup Regulatory Fees	5/8 of \$.01/barrel; 1/15 of \$.01/1,000 cubic feet of gas. (u)
	Oyster Sales Fee	\$1 per 300 lb. barrel of oysters taken from Texas waters.
Utah	Mining Severance Tax	2.6% of taxable value for metals or metalliferous minerals sold or otherwise disposed of.
	Oil and Gas Severance Tax	3% of value for the first \$13 per barrel of oil, 5% from \$13.01 and above; 3% of value for first \$1.50/mcf, 5% from \$1.51 and above; and 4% of taxable value of natural gas liquids.
	Oil and Gas Conservation Fee	.002% of market value at wellhead.
Virginia	Forest Products Tax	\$1.15 per 1,000 feet B.M. of pine lumber and 1,000 board feet of pine logs. \$.475 collected per cord of pine pulpwood.
Washington	Coal Surface Mining Reclamation Tax	Varies depending on balance of Coal Surface Mining Reclamation Fund.
	Uranium and Thorium Milling Tax (tax reported as inactive)	\$0.05/per pound.
	Enhanced Food Fish Tax	0.09% to 5.62% of value (depending on species) at point of landing.
	Timber Excise Tax	5% of stumpage value for harvests on public and private lands.

See footnotes at end of table.

TAXES

STATE SEVERANCE TAXES: 2015—Continued

<i>State</i>	<i>Title and application of tax (a)</i>	<i>Rate</i>
West Virginia	Natural Resource Severance Taxes	Coal: State rate is greater of 5% or \$.75 per ton (4.65% for state purposes and .35% for distribution to local governments). Special state rates for coal from new low seam mines. For seams between 37" and 45" the rate is greater of 2% or \$.75/ton (1.65% for state purposes and .35% for distribution to local governments). For seams less than 37" the rate is greater of 1% or \$.75/ton (.65% for state purposes and .35% for distribution to local governments). For coal from gob, refuse piles, or other sources of waste coal, the rate is 2.5% (distributed to local governments). Additional tax for workers' compensation debt reduction is \$.56/ton. Two special reclamation taxes at \$.07/clean ton and \$.02/clean ton. Limestone or sandstone, quarried or mined, and other natural resources: 5% of gross value. Natural gas: 5% of gross value (10% of net tax distributed to local governments), additional tax for workers' compensation debt reduction is \$.047/mcf of natural gas produced. Oil: 5% of gross value (10% of net tax distributed to local governments). Sand, gravel or other mineral products not quarried or mined: 5% of gross value. Timber: 1.22%, additional tax for workers' compensation debt reduction is 2.78%.
Wisconsin	Mining Net Proceeds Tax	Progressive net proceeds tax ranging from 3% to 15% is imposed on the net proceeds from mining metalliferous minerals. The tax brackets are annually adjusted for inflation based on the change in the GNP deflator.
	Oil and Gas Severance Tax	7% of market value of oil or gas at the mouth of the well.
	Forest Crop Law Severance Tax	10% of stumpage.
	Managed Forest Law Yield Tax	5% yield tax. This tax will be waived for the first five years of most MFL land.
Wyoming	Severance Taxes	Severance Tax is defined as an excise tax imposed on the present and continuing privilege of removing, extracting, severing or producing any mineral in this state. Except as otherwise provided by W.S. 39-14-205. The total Severance Tax on crude oil, lease condensate or natural gas shall be six percent (6%). Stripper oil is taxed at four percent (4%). Surface coal is taxed at seven percent (7%). Underground coal is taxed at three and three-fourths percent (3.75%). Trona is taxed at four percent (4%). Bentonite, sand and gravel, and all other minerals are taxed at two percent (2%). Tertiary Oil (4%). Natural Gas (6%). Uranium (4%).

Source: The Council of State Governments, 2015.

Note: Severance tax collection totals may be found in the Chapter 7 table entitled "State Government Revenue, By Type of Tax."

Key:

(a) Application of tax is same as that of title unless otherwise indicated by a footnote.

(b) Tax rates and applicability for these severance taxes determined by a vote of the appropriate association within the seafood industry, by the Alaska Seafood Marketing Institute, or by the Department of Revenue. Proceeds from these elective assessments are customarily appropriated for benefit of the seafood industry.

(c) Metallic minerals, molybdenum ore, coal, oil shale, oil, gas, CO₂, and coalbed methane. Petroleum Profits Tax (PPT) was changed in 2007.

(d) As of July 1, 2007, set at .0007 mill/\$1.

(e) Clay, gravel, phosphate rock, lime, shells, stone, sand, heavy minerals and rare earths.

(f) Fee sunsets in 2018 under state law.

(g) Buyer deducts amount from payment to grower; amount forwarded to Department of Natural Resources.

(h) Petroleum, oil, gas and other hydrocarbons. Oil inspection fee rate based on Department of Revenue factsheet.

(i) Coal, oil and gas, based on Department of Revenue information.

(j) Oil inspection fee rate based on Department of Revenue factsheet.

(k) Coal, oil and gas, based on Department of Revenue information.

(l) Production is considered commercial when it exceeds 50,000 tons annually. There is a six-year phase-in of the tax. In years one and two, the rate is zero. In year three, it is 25% of the statutory rate and 50% and 75% in years four and five respectively. An Aggregate Materials Tax

is imposed by resolution of county boards. It is not required that any county impose the tax, which is \$.10/cubic yard or \$.07/ton on materials produced in the county.

(m) Metals, precious and semi-precious stones and gems.

(n) The maximum rate of 0.3% is split between the Oil or Gas Conservation Tax and the Oil, Gas and Coal Natural Resource Account Fund. Currently the Oil or Gas Conservation Tax is .18% and the Oil, Gas and Coal Natural Resource Account Fund tax rate is .08%.

(o) Cement and gypsum or allied products.

(p) Natural resources except oil, natural gas, liquid hydrocarbons or carbon dioxide.

(q) Oil, coal, gas, liquid hydrocarbons, geothermal energy, carbon dioxide and uranium.

(r) Rate reduced by 50% if burned in cogeneration facility using renewable resources as fuel to generate at least 10% of its energy output. Coal shipped out of state is subject to the \$.02/ton tax and 30% of the \$.375/ton tax. The coal may be subject to up to the \$.375/ton tax at the option of the county in which the coal is mined.

(s) Asphalt and ores bearing lead, zinc, jack, gold, silver, copper or petroleum or other crude oil or other mineral oil, natural gas or casing-head gas and uranium ore.

(t) Any mineral fuel used in the production of energy, including coal, lignite, petroleum, oil, natural gas, uranium and thorium.

(u) Counties and municipalities also authorized to levy severance taxes on sand, gravel, sandstone, chert and limestone at a rate up to \$.15/ton.

(v) Fees will not be collected when Oil-Field Cleanup Fund reaches \$20 million, but will again be collected when fund falls below \$10 million.